

declared. It is submitted that an Interference should be established having Counts 1-26, with Claims 1-26 of U. S. Patent No. 4,948,052 and Claims 76-101 of this application, respectively, corresponding to the Counts.

Since this application Serial No. 932,470 has been involved in Interference No. 101,982 in which a decision has been rendered in applicant's favor, and applicant has been waiting to be informed that Ex parte prosecution has been resumed, applicant would like to be informed of the status of this application Serial No. 932,470.

It is noted that it appears that subject application and U. S. Patent No. 4,948,052 to Hunter were co-pending in the same Group Art Unit, and have filing dates which are two (2) years and approximately four (4) months apart, with applicant being the first to file. A declaration is submitted in accordance with 37 C. F. R. 1.608 (a) alleging a basis upon which applicant is entitled to judgment relative to the patentee.

In accordance with 37 C. F. R. 1.607 (a), Claims 76-101 are copied below with the terms of the claims applied to the structure shown in subject application: (See Figure 13 and lines 22-26 of Page 36, and Pages 37 and 38 for the "cam action biasing configuration") --

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(Figure 1, 13)

Claim 76. An oscillating sprinkler unit, comprising:
a sprinkler head (output cap 108) mounted for rotation about a first axis;
drive means (ring gear 50) comprising a carrier (gear cage 18) and alternately operable
terminal gear means (gears 34 and 44) on said carrier (gear cage 18) and shiftable
5 with said carrier (ring gear 50) to alternately engageable driving
positions within said drive means (output cap 108) for driving said
sprinkler head (toggle device 64) in alternate directions;
shifting arm means (projections 100 and 200) pivotally moveable between alternate
shifting positions by shoulder means (ring gear 50) carried by said (gear cage 18)
10 drive means (31B) for shifting said carrier (gear cage 18) between said
alternately engageable positions; and
cam means (31B) on said carrier, and follower means (39B, 127) slideably
engaging said cam means (31B) for biasing and retaining
said carrier (gear cage 18) in a selected one of said alternately
15 engageable positions until shifted therefrom by said
shifting arm means (toggle device 64).

Claim 77. The sprinkler unit of Claim 76 wherein
said cam means (31B) comprises a cam lobe (125, 35B) and said follower means (39B, 127)
engages said lobe on opposite sides thereof for biasing
and retaining said carrier (gear cage 18) in a selected one of said
5 alternately engageable positions.

Claim 78. The sprinkler of Claim 77 wherein said
spring biased follower means comprises a generally L-shaped
leaf spring (127 and angled end).

Claim 79. The sprinkler of Claim 78 wherein said cam
(125, 35B) (projecting member 31B)
lobe is on said carrier and said spring biased follower
(39B, 127) (in base member 4)
means is mounted on adjacent housing structure.

Claim 80. The sprinkler of Claim 79 wherein said
(125, 35B) (Fig. 13)
cam lobe is of a substantially symmetrical V-shape; and
said spring biased follower means comprises a
(127 and angled end)
generally L-shaped leaf spring.

Claim 81. The sprinkler of Claim 77 wherein said
(125, 35B) (projecting member 31B)
cam lobe is on said carrier and said spring biased
(39B, 127) (in base member 4)
follower means is mounted on adjacent housing structure.

Claim 82. The sprinkler of Claim 81 wherein:
(26)
drive means comprises a drive gear driven by a drive
motor and mounted for rotation about a second axis
spaced from said first axis;
(gear cage 18)
5 said carrier is mounted for pivotal movement about said
second axis; and (toggle device 64)
said shifting arm means is mounted for pivotal movement
about said first axis.

Claim 83. The sprinkler unit of Claim 82 wherein:
said carrier^(gear cage 18) comprises a yoke⁽²²⁾ surrounding said first axis
and said shifting arm means^(toggle device 64) engages said carrier
through lost motion means^(60, 88) comprising shoulder means
5 on the opposite side of said first axis from said
second axis.

Claim 84. The sprinkler of Claim 77 wherein said
cam lobe^(125, 35B) is of a substantially symmetrical V-shape; and^(Fig. 13)
said spring biased follower means comprises a generally
L-shaped leaf spring^(127 and angled end).

Claim 85. The sprinkler of Claim 76 wherein:
drive means comprises a drive gear⁽²⁶⁾ driven by a drive motor
and mounted for rotation about a second axis spaced
from said first axis;
5 said carrier^(gear cage 18) is mounted for pivotal movement about said
second axis; and
said shifting arm means^(toggle device 64) is mounted for pivotal movement
about said first axis.

Claim 86. The sprinkler unit of Claim 76 wherein:
said carrier^(gear cage 18) comprises a yoke⁽²²⁾ surrounding said first
axis and said shifting arm means^(toggle device 64) engages said
carrier through lost motion means^(60, 88) comprising
5 shoulder means on the opposite side of said first
axis from said second axis.

(Figure 1, 13)
Claim 87. An oscillating sprinkler unit, comprising:
a sprinkler head (output cap 108) mounted for rotation about a first axis;
(page 12, lines 20, 21)
a drive motor;
a reversible gear train (gears 34, 32, 30, 26, 42, 44) for drivingly connecting said
(output cap 108)
5 drive motor to said sprinkler head for driving said
(output cap 108)
sprinkler head in alternate directions, comprising a
(ring gear 50) (output cap 108)
final drive gear connected to said sprinkler head
(gear cage 18)
shiftable drive means comprising a carrier and
(gears 34 and 44)
alternately operable terminal gear means on said
(gear cage 18)
10 carrier shiftable with said carrier to alternately
(ring gear 50)
engageable positions with said final drive gear for
(output cap 108)
driving said sprinkler head in alternate directions;
(toggle device 64)
shifting arm means pivotally mounted adjacent said
(gear cage 18)
carrier and moveable between alternate shifting
(projections 100 and 200)
15 positions by engagement with shoulder means carried
(60, 88)
by said gear train, and lost motion means for
(toggle device 64)
connecting said shifting arm means with said
(gear cage 18) (gear cage 18)
carrier for shifting said carrier between said
alternately engageable positions upon movement of
(toggle device 64)
20 said shifting arm means between said alternate
shifting positions; and
(31B) (gear cage 18)
cam means on said carrier slideably engageable by
(39B, 127)
adjacent biasing follower means for biasing and
(gear cage 18)
maintaining said carrier in a selected one of said
alternately engageable positions until shifted
(toggle device 64)
25 therefrom by said shifting arm means.

Claim 88. The sprinkler unit of Claim 87 wherein
(31B) (125, 35B)
said cam means comprises a cam lobe and said adjacent
biasing follower means comprises spring biased follower
(39B, 127)
means engaging said lobe on opposite sides thereof.

Claim 89. The sprinkler of Claim 88 wherein said
spring biased follower means comprises a generally
(127 and angled end)
L-shaped leaf spring.

Claim 90. The sprinkler of Claim 89 wherein said
(125, 35B) (projecting member 31B) (127 and angled end)
cam lobe is on said carrier and said L-shaped leaf spring
(in base member 4)
biased is mounted on adjacent housing structure.

Claim 91. The sprinkler of Claim 88 wherein said
(125, 35B)
cam lobe is on said carrier and said spring biased follower
(39B, 127) (in base member 4)
means is mounted on adjacent housing structure.

Claim 92. The sprinkler of Claim 88 wherein said
(125, 35B) (Fig. 13)
cam lobe is of a substantially symmetrical V-shape; and
said spring biased follower means comprises a generally
(127 and angled end)
L-shaped leaf spring.

Claim 93. The sprinkler of Claim 92 wherein:
reversible gear train comprises a drive gear⁽²⁶⁾ driven by
said drive motor and mounted for rotation about a
second axis spaced from said first axis;
5 said carrier^(gear cage 18) is mounted for pivotal movement about
said second axis; and
said shifting arm means^(toggle device 64) is mounted for pivotal movement
about said first axis.

Claim 94. The sprinkler unit of Claim 93 wherein:
said carrier^(gear cage 18) comprises a yoke⁽²²⁾ surrounding said first
axis and said shifting arm means^(toggle device 64) engages said
carrier through said lost motion means^(60, 88) comprising
5 shoulder means on the opposite side of said first
axis from said second axis.

Claim 95. The sprinkler of Claim 87 wherein:
said reversible gear train comprises a drive gear⁽²⁶⁾
driven by said drive motor and mounted for rotation
about a second axis spaced from said first axis;
5 said carrier^(gear cage 18) is mounted for pivotal movement about
said second axis; and
said shifting arm means^(toggle device 64) is mounted for pivotal movement
about said first axis.

Claim 96. The sprinkler unit of Claim 87 wherein:
said carrier (gear cage 18) (22) comprises a yoke (toggle device 64) surrounding said first axis and said shifting arm means engages said carrier through said lost motion means (60, 88) comprising shoulder means on the opposite side of said first axis from said second axis.

Claim 97. The sprinkler of Claim 96 wherein said cam lobe (125, 35B) is of a substantially symmetrical V-shape (Fig. 13) and said spring biased follower means comprises a generally L-shaped leaf spring (127 and angled end).

Claim 98. An oscillating sprinkler unit, (Figure 1, 13) comprising:
(2)
a housing having a generally cylindrical configuration with a central axis, an inlet (95) at a lower end for attachment to a source of water and an outlet (8) at an upper end;
(output cap 108)
a sprinkler head mounted at said upper end for rotation about said central axis;
(page 12, lines 20, 21)
a drive motor mounted in said housing for driving said sprinkler head;
(34, 32, 30, 26, 42, 44)
10 a shiftable gear train comprising terminal drive gear means (gears 34 and 44) (ring gear 50) including an internal gear connected to said sprinkler head, (output cap 108) shiftable means for alternatively shifting said terminal drive gear means (gears 34 and 44) alternatively

(ring gear 50)
into engagement with said internal gear▲for
(output cap 108)
15 driving said sprinkler head▲in alternate directions;
(12)
said shiftable drive means comprising a drive shaft▲
(page 12, lines 20, 21)
driven by said drive motor▲and operatively
(26)
connected to a drive gear▲mounted for rotation
about a second axis offset from said first axis;
(gear cage 18)
20 a pivoting carrier▲mounted for pivotal movement about
said second axis;
(34) (gear cage 18)
one of said terminal gear means▲mounted on said carrier▲
on one side of said second axis, and the other of
(44) (gear cage 18)
said drive gears▲mounted on said carrier▲on the
25 other side of said second axis;
(toggle device 64) (gear cage 18)
a shifting arm▲mounted adjacent said carrier▲for pivotal
movement about said first axis;
(60, 88) (toggle device 64)
lost motion means▲disposed between said shifting arm▲
(gear cage 18)
and said carrier▲for connecting said shifting arm
30 to said carrier for shifting said terminal drive
(gears 34 and 44)
gear means▲to alternately engageable positions;
(90, 92)
first over-center biasing means▲for maintaining said
(toggle device 64)
shifting arm means▲in a selected one of said
alternately shifting positions; and
(31B) (gear cage 18)
35 over-center cam means▲on said carrier▲slideably
engageable by adjacent spring biased follower
(39B, 127) (gear cage 18)
means▲for biasing and maintaining said carrier▲
in a selected one of said alternate engageable
positions.

Claim 99. A sprinkler unit according to Claim 98
wherein:

5 said over-center cam means comprises a dual faced cam^(35B, 125)
and said follower means comprises a generally
L-shaped spring^(127 and angled end) disposed between said carrier^(gear cage 18) and
said housing^(base member 4) for biasing said shifting arm^(toggle device 64) to said
one of said alternately shifting positions.

Claim 100. The sprinkler of Claim 99 wherein said
dual faced cam^(35B, 125) is on said carrier^(projecting member 31B) and said spring^(39B, 127) is
mounted on adjacent housing structure^(in base member 4).

Claim 101. The sprinkler of Claim 100 wherein said
cam has a lobe that is of a substantially symmetrical
V-shape^(Fig. 13); and
said spring comprises a generally L-shaped leaf spring^(127 and angled end).

It would be appreciated if an INTERFERENCE could
be set up as soon as possible.

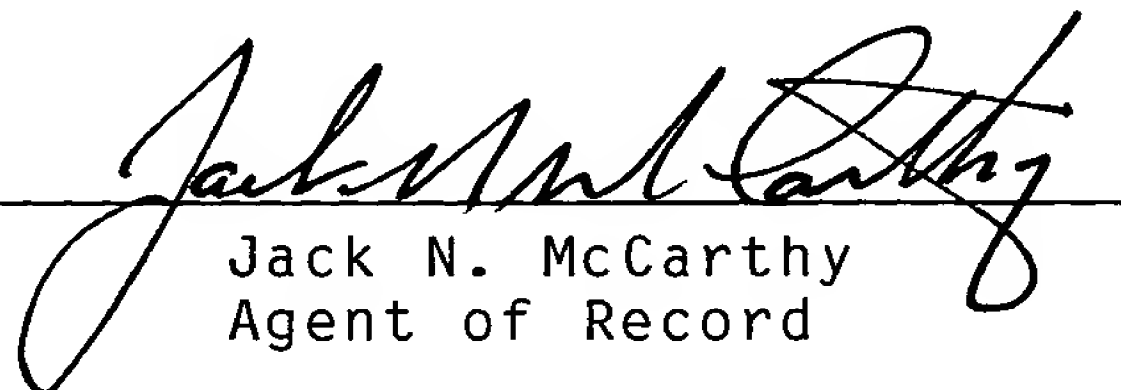
A transmittal letter is enclosed, authorizing
payment of any additional fees to be charged to Deposit
Account No. 13-0120 which are not covered by applicant's
enclosed check for \$350.00.

Applicant must repeat that this application has been in Interference No. 101,982. This Interference No. 101,982 involved another patent of Edwin J. Hunter.

Respectfully submitted,
CARL L. C. KAH, JR.

JNMC:jco

By

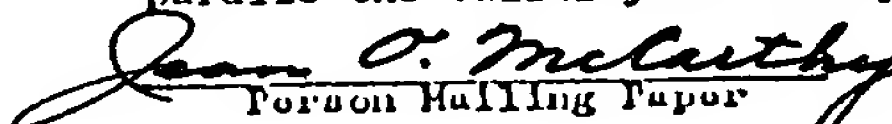

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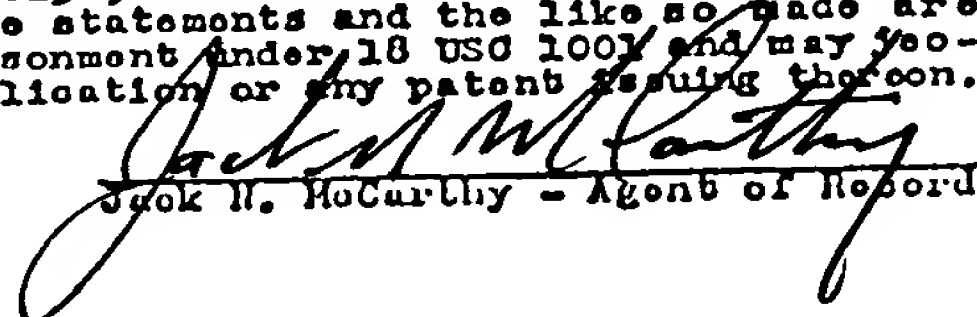
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Docket No.: CLCK-86

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I hereby verify that this amendment, including any drawing referred to therein, is being deposited with the U. S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D. C. 20231, and this statement was made with the knowledge that willful false statements and the like so made are punishable by fine and/or imprisonment under 18 USC 1001 and may jeopardize the validity of the application or any patent issuing thereon.


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